# A SUMMARY OF ROUNDTABLE DISCUSSIONS ON STRUCTURING A PUBLIC BENEFITS PROGRAM FOR THE WISCONSIN DEPARTMENT OF ADMINISTRATION

Draft February 6, 2000

Draft

#### Introduction

Representatives of the Wisconsin Department of Administration (DOA) met with a number of energy efficiency and renewable energy policy and program experts in Washington, D.C. on January 6th and 7<sup>th</sup>, 2000. The sessions were arranged, hosted and facilitated by the Energy Programs Consortium (EPC). (See agenda - Appendix A, attendance list - Appendix B, questions - Appendix C, and program menu Appendix D).

The objective of this roundtable session was to provide the DOA staff with information from other states on public benefits program structure, content, design and implementation in order to assist in the development of the Wisconsin public benefits program for energy efficiency and renewable energy.

EPC would like to thank Chuck Guinn for developing the structure of the roundtable discussions, Jeff Genzer for acting as the facilitator, Pat Meier, Director, Wisconsin Energy Bureau, for providing advice and support of the roundtable session, Ivan Brandon for final editing, and the meeting participants for their helpful comments and insights.

EPC is a joint venture of the National Energy Assistance Directors' Association (NEADA), the National Association of State Energy Officials (NASEO), and the National Association for State Community Services Programs (NASCSP). The purpose of the EPC is to foster coordination and cooperation among state and federal agencies in the energy area. For further information contact Mark Wolfe, Executive Director, EPC at 202-237-5199 or Jeff Genzer, Legal Counsel at 202-467-6370.

# A SUMMARY OF ROUNDTABLE DISCUSSIONS ON STRUCTURING A PUBLIC BENEFITS PROGRAM FOR THE WISCONSIN DEPARTMENT OF ADMINISTRATION

The recommendations and observations raised during the roundtable session are summarized in the following four parts:

### Part 1: Program Structure and Content

The discussions of program structure and content led to the following series of recommendations:

- The structure and content of the program should be driven by a clearly delineated set of program goals and objectives. This will have a direct impact on determining the number of program administrators required and the design of the program structure. While the Wisconsin statute does provide some guidance, additional guidance is needed to design an effective program. Ideally, Wisconsin should have a plan offering a road map to implement the vision for energy efficiency and renewable energy before going forward with the development of the program's structure.
- A single program administrator would provide the DOA a single contract point responsible for supervising all program elements. A single program administrator would require less DOA staffing to provide policy direction and oversight then would a multi-program administrator model. However, it may be difficult to identify a single nonprofit entity that could administer such a large budget project.
- The use of multi-program administrators significantly reduces the risk of "too many eggs in one basket" and enables more focused program administration and accountability. This structure also would provide the DOA with more flexibility in administrator selection and oversight. If the multi-program administrator structure is selected the administrators' responsibilities could be selected by sector (e.g. commercial/industrial, residential), customer size, region of state, function (e.g. new construction, performance contracting) or a combination of these.
- One possible design for program administrators might be industrial and large commercial; residential, rural and small commercial; education and training; renewable energy and research and development; plus an independent evaluation contractor. Marketing functions should be integrated into the individual program elements.
- Standard performance contracting activities should occur in industrial, commercial and multi-family residential programs.

- The overall program evaluation function should be performed by a separate contractor reporting to the DOA. This independent evaluation will be critical in assessing the overall performance of the individual administrators and their program elements.
- With either structure, the DOA would need to add staff with the skills and experience
  to provide policy direction, oversee the program development and implementation,
  monitor results, and provide guidance on emerging trends and opportunities (as the
  Vermont Department of Public Service staff does under their single administrator
  model).
- Contracts are a critical means to oversee the program administrators. Therefore, an initial contract covering the entire 5 year period is not likely to be in the DOA's best interest. A two or three year contract with a three or two year extension would be a better option.
- Program content should be balanced and reflect the opportunities in Wisconsin
  including some successful ongoing programs. A diverse set of program elements will
  be critical in meeting the likely set of objectives. Flexibility should be provided to
  the administrators allowing them to add, subtract or alter programs as opportunities
  and circumstances change.
- The allocation of funds among program categories should be driven by the program objectives and opportunities rather than the source of the funds. For example about 70 percent of the funds are collected from the residential sector; allocating a strict 70 percent of the funds to residential programs may result in missed opportunities. Also, institutional programs would directly benefit residential consumers by lowering the cost of energy for the institutions serving them, including taxpayer-supported institutions.
- The change in focus from utility-based to market-based programs changes the program evaluation from a strict utility resource acquisition test to meeting general societal goals of more jobs, less air pollution emissions, reduced energy use, and enhanced electricity reliability. The individual program elements must be evaluated against these goals. The initial design of each program element must include developing the data needed to determine the elements and identifying critical areas that will provide a benchmark to evaluate progress toward achieving the societal goals. An evaluation system must be in place as the programs are implemented.
- The requirement in the statute of an 866 ton NOx emission set-aside to be achieved by the Program could be a problem for program design. Achieving the targeted NOx emissions to the EPA verification standards would require focusing the program design on projects that produce savings in the short-term instead of long term program elements that would transform energy efficiency markets. A way of dealing with this set-aside requirement without negatively impacting a balanced program must be found

# **Part 2: Program Development**

A number of issues and suggestions were made concerning the development of the program. These suggestions included the following:

- National programs and brands such as Energy Star Products would provide an
  excellent platform for many potential Wisconsin market transformation programs.
  The programs could be customized for use in Wisconsin and preserve a Wisconsin
  identity. New York is an Energy Star partner and preserves its identity through its
  Energy Smart branding and marketing programs.
- Building codes and especially their enforcement are an excellent means to transform
  the market for new construction. Programs that lead to tightened energy efficiency
  codes or strengthened compliance of existing codes are an excellent use of public
  benefits funding.
- Enforced energy efficiency codes provide a good platform for other new construction market transformation programs such as Home Energy Rating Systems. (HERS) with energy efficient mortgages (EEMs) and Energy Star Homes. An administrator for the new construction program would coordinate their development. Computer software is available to link these programs and customizing this software for Wisconsin would be a reasonable program element.
- Building commissioning is a means to transform the new commercial building market. Developing a building commissioning program is a logical step especially if seizing potentially lost opportunities is an objective.
- The appliance and equipment market transformation programs should focus primarily
  on the retailers and dealers in the distribution chain from manufacturers to consumer.
  These programs should also include elements to increase consumer interest and
  demand. Such programs benefit from some form of financial incentive. A key
  activity in these programs is the training and education of the ever-changing retail
  staff.
- Bulk procurement by state and local agencies is a means to stimulate a market for high efficiency appliances and equipment. Such procurement could be coordinated with federal activities.
- Most market transformation programs take time to develop, implement and influence the market. Recognition of the time requirement is necessary in the overall program design and evaluation.
- Renewable energy programs are most effective when targeted to significant barriers such as high initial costs. Focusing renewable energy programs on "near commercial" technologies such as wind systems, bio-mass systems, ground source heat pumps, and photovoltaic installation in customer applications increase the probability of success.

A diverse set of small grants to many small renewable energy projects is less likely to be successful.

- High visibility renewable energy projects in public facilities can be used to educate the public concerning renewable energy opportunities. This approach is particularly useful when the renewable energy funding is limited.
- Encouraging development of "clean" distributed generation is a logical use of public benefits funds. Pro-active work in lowering state barriers to implementing distributed generation such as friendly interconnection standards and procedures would be a very positive step in developing this market.
- The standard performance contracting (SPC) program elements should be designed with direct input from the energy efficiency industry. The level of monitoring and verification required and incentives offered should be compatible. Strong marketing of SPC programs should be included in the program design.
- To attract energy service companies (ESCOs) to enter the Wisconsin market a significant long-term program is needed. The SPC program designs should recognize the 12 to 18 month development cycle for SPC projects in the large commercial and industrial markets. Targeting SPC programs to sectors such as food markets and multi-family housing is a means to transform these markets. A mix of market transformation and SPC programs should help provide identifiable services in both the short and long term.

#### **Part 3: Possible Problem Issues**

A number of legal or contractual issues have been identified by other states as they have gone forward implementing their programs. These issues include:

- whether public benefits funds are considered general tax revenues or special funds and if there is a tax liability attached to the transfer of public benefit funds:
- how state procurement rules will be applied to these programs and whether or not program administrators must adhere to civil service hiring procedures;
- limitations on delivery of residential efficiency up to 150% of poverty versus 200% under the existing utility-delivered Wisconsin programs;
- how the question of ownership of intellectual property rights is settled;
- how the utilities' residual responsibilities will be determined;
- whether anti-trust rules are implicated in product development;
- whether funds can be targeted only to in-state providers;
- the impact of interconnection standards and net metering rules on the development of renewable energy; and
- the degree of performance bond requirements.

#### Part 4: General Advice

During the meeting a number of issues were raised that the participants felt were important to be taken into account while addressing the development of the program. These included the following suggestions:

- Remember meeting the customers needs is the key to a successful program.
- Scan the horizon for potential problems and address potential problems early.
- Coordination with the low income programs especially the expanded weatherization program is important.
- Develop a diverse portfolio, but be selective.
- Provide flexibility to program administrators to start new programs to seize new opportunities and close ineffective programs. Reward their innovation and creativity.
- Determine how program success will be measured by the Wisconsin government and the public. Manage the program to meet "success" milestones.
- Understand the markets you are trying to transform and work with the market participants.
- Use the RFP process and follow up negotiations to provide detailed policy and program guidance to the program administrators.

# **Appendix A: Attendance List**

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Appendix B: Agenda

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Agenda

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# **Energy Programs Consortium Workshop Public Benefit Programs in Wisconsin**

Law Offices of:

Duncan, Weinberg, Genzer & Pembroke
1615 "M" Street, N.W.
Suite 800

Washington, D.C. 20036
202-467-6370

Thursday, January 6, 2000

10:00 - 10:30 a.m. Welcome and Introductions

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# John Marx, Administrator, Division of Energy and **Public Benefits**

# Wisconsin Scope/Vision/Summary of Wisconsin Legislation

Pat Meier, Director, Wisconsin Energy Bureau

10:30 a.m. - 12:30 p.m. **Program Administration and Structures ("A" Questions**)

New York Model

Brian Henderson, Program Director, New York State Energy Research and Development Authority

Vermont Model

Richard Sedano, Commissioner, Vermont Department of Public Services

Discussion based on Questions Jeff Genzer, Moderator

12:30 - 1:00 p.m. Lunch

1:00 - 5:00 p.m. **Program Design and Content ("B" Questions)** 

> Discussion based on Questions Jeff Genzer, Moderator

Friday, January 7, 2000

9:00 - 11:00 a.m. **Program Implementation – Lesson Learned** ("C" **Questions**)

Discussion based on Questions and information from prior

Jeff Genzer, Moderator

11:00 - 1:00 p.m. **Summary Discussion** 

(If you were us what would you do?)

1:00 p.m. Adjourn

# **Appendix C: Questions List**

# **Energy Programs Consortium Workshop Public Benefit Programs in Wisconsin**

Law Offices of:

Duncan, Weinberg, Genzer & Pembroke
1615 "M" Street, N.W.
Suite 800
Washington, D.C. 20036
202-467-6370

Thursday, January 6, 2000 and Friday, January 7, 2000 DRAFT QUESTIONS 12/20/99

# (A) Program Administration and Structure

- 1. Using the Wisconsin Focus on Energy model, we would propose to contract with non-profit administrators in the following areas:
  - a) Commercial and Industrial
  - b) Residential
  - c) Marketing
  - d) Education and Training
  - e) Evaluation
  - f) Renewables and R& D
  - g) Standard Performance Contract

We have the option to add or delete administrators or to organize them according to a different scheme (e.g., geographic, etc.)

- (a) What is the most appropriate organization and number of administrators?
- 2. The expectation is that we will contract with administrators who will take direct responsibility for operation and management of the programs. What is the appropriate level of control or supervision to be retained by the Division of Energy and Public Benefits (DEPB)? What is the overall role of the DEPB?
- 3. The potential of a five-year program offers a consistency that is rare in the energy efficiency business. Yet, a single five-year contract would seem to preclude a certain amount of flexibility for the DEPD. What is the appropriate length of contract?

- 4. How should the money be allocated among the administrators? Of particular interest, what is the "right" portion to dedicate to evaluation and to marketing expenses?
- Anderson, Coakley, Goldman, Henderson, Roberts, McKinley, Nadel, Sedano, Gilligan
- 5. We are committed to identify environmental emission reductions, economic development impacts and other quality of life benefits. How do we do this? Is it an appropriate part of the evaluation contract?
- 6. The Wisconsin statute establishes a 866 ton annual emissions allowance set-aside for energy efficiency programs. Are these certain kinds of programs that should or should not be eligible?
- 7. Wisconsin, like most states, exhibits a variety of divergent demographic and business attributes. We often hear that each program must "be tailored to the community in which it is delivered." This must be balanced against the need to minimize planning and administrative costs. What is the value of a uniform statewide program?
- 8. The Wisconsin energy efficiency activities will be in transition from primarily utility administered DSM programs to government and not-for-profit administered program. Are there models of such transitions? If so, what are the lessons learned?
- (B) Program Design and Content
- 9. The DEPB will provide policy and program direction to the program administrators through the RFP and contracting processes.
  - a) What level of detail should be provided?
  - b) Should direction include required program activities?
  - c) To what degree should potential administrators be able to include new program elements in their proposals to DEPB?
  - d) To what degree should administrators be able to add new program elements to their proposals after they have entered a contract with DEPB?
- 10. What metrics should be used to evaluate potential program measures? How would the evaluation of Public Benefit programs, especially market transformation activities, differ from traditional utility DSM measures evaluation?
- 11. The retail sale of electricity to customers, in many states, is beginning to be provided by competitive electricity service providers (ESPs). With or without such competition in Wisconsin, how can systems benefit charge funded programs increase the number and scope of energy efficiency services offered by ESPs? Similarly, how can such a program increase the interest of ESPs in offering "green" electricity?
- 12. Should Public Benefits programs encourage/promote/facilitate/assist the development of a distributed generation market; if so, how?
- 13. Which program elements would you advise <u>must</u> be included in the Public Benefits program? Why? Which program elements would you advise not to include? Why?
- 14. What programs in other states are useful models and why? Please provide any written information you care to.
- 15. Many political figures and decision-makers appear to be convinced that "market transformation" is a "silver bullet" that should be the sole focus of the Public Benefits program? Is this reasonable? Why or why not?

- 16. National programs such as the Energy Star programs offer a market transformation platform for a state program.
  - a) Is a state partnership with a national program desirable?
  - b) If so, what advice would you have regarding customizing a national market transformation program for Wisconsin?
  - c) Which market transformation programs or other regional or national programs would you recommend that Wisconsin participate in?

#### Henderson, Anderson

- 17. Are these other programs offered by the federal Department of Energy or the Environmental Protection Agency that might provide matching funds or other types of resources? Please explain.
- 18. We based a substantial portion of the Focus on Energy pilot on the Energy Star program. At the same time, we attempted to unify the entire pilot program under the title "Focus on Energy". Does this risk confusing the market?
- 19. Should the Public Benefits program focus more upon deploying specific highly efficient technologies or in developing new or better delivery systems for efficient technologies and practices? Why?
- 20. The "Focus on Energy Renewable" program was constructed in such a way as to allow a multitude of projects develop without specific director or mandates, in other words, a great number of relatively small grants were made for a wide variety of unrelated types of projects. Would it be better to "pick likely winners" and focus the effort on a shorter list of renewable technologies?
- 21. Electricity prices in Wisconsin tend to be below the national average yet generation and transmissions capacity has become tight.
  - a) What issues does this raise for program design?
  - b) For example, should distributed generation in load pockets be stressed?
- 22. Are building code upgrade and enforcement activities reasonable elements of a public benefits program? Any examples to share? What measures of success exist?
- 23. Are there legal or contractual barriers that have been identified in other jurisdictions that we should be aware of in the design and implementation of this program? Please be specific and provide written information if available.
- (C) Lessons Learned
- 24. Standard offer programs are the largest element of both the California and New York public benefits programs. Why? Are there any issues in program design we should be aware of?
- 25. How can residential builders be encouraged to build highly efficient homes? What incentives work?
- 26. New residential construction programs might include building code upgrade and enforcement, home-rating systems tied to energy efficient mortgages and Energy Star homes. How might these programs be coordinated?

- 27. Highly efficient appliance market transformation requires manufacturers to supply; dealers/retailers to stock and market and customers to demand. Where in this chain should we place our emphasis?
- 28. How effective are appliance/equipment market transformation programs with low or no financial incentives?
- 29. What is the long-term sustainable impact of Standard Performance Contract programs when the incentives are reduced or finished?

# **Appendix D: Program Menu**

A number of specific programs are candidates for inclusion in the Wisconsin public benefits program for energy efficiency and renewable sources. A menu of such possible programs, based upon implementation in the states, is provided in the following sections. These program menu items are presented in general terms; however, significant detail on actual programs of each type presented is available.

Nearly all the advocates of specific energy efficiency programs classify their programs as market transformation programs. Programs which raise the demand for and/or supply of energy efficient products and practices are market transformation programs. How permanent is the market transformation caused by a specific program is of considerable debate among the advocates.

A basic difference among programs is whether the program has a technology or market focus. Technology-focus programs place emphasis on bringing specific new technologies into the market, while market-focus programs place emphasis on changing the way consumers and other market actors interact. The market-focus programs build upon the existing motivations of the market actors.

The menu is divided into the following three sections:

#### Part 1: General Areas

#### **Loan Programs**

Objectives of loan programs are to lower the available capital barrier and/or the project financing cost barrier to make EE projects more attractive to customers.

Loan programs can be implemented utilizing various methods including, but not limited to:

- Interest buy downs of commercial bank loans, often coupled with loan guarantees.
- Revolving loan programs administered by either public agencies or private financial institutions.
- Loan programs can be targeted to specific end use sectors such as small commercial
  firms or to specific measures such as chiller replacement; usually there is a cap on the
  loan amount.

# **Standard Performance Contracting (SPC)**

SPC programs encourage investment in cost-effective energy efficiency (EE) measures and renewable energy technologies by providing direct payments for measured and verified energy savings, as a means of accelerating the development of a self-supporting EE industry.

Direct payments provide an incentive for energy service providers and/or energy service companies to work with customers to develop projects. SPC programs can be targeted to specific end-use sectors such as industrial, commercial, public facilities, educational, health care or multi-family residential. Also SPC programs can provide a higher level of payments for higher risk projects (motor system optimization or chiller replacement) than for lower risk projects (lighting measures).

The level of the direct payment often is a fixed percentage of the performance contract with a cap on the total payment. Payments are made by installments. Often the first installment is paid when a measure is installed and working properly, the second installment upon documentation of the first year energy savings and the later installments upon documentation of the annual energy savings.

SPC programs can be complemented by technical assistance programs and/or grant programs for potential customers such as school districts to develop their preliminary assessments prior to a performance contract.

SPC programs can be used to develop new delivery systems for EE measures. In many states financial incentives are provided to encourage program participation, e.g., California. New York and Wisconsin.

### **Technical Assistance**

The objective of technical assistance programs is to help business and institutions to improve energy efficiency, identify energy saving opportunities and the means to implement measures to realize these opportunities. The level of technical assistance can vary from simple EE audits to complex evaluations of manufacturers' processes for EE, productivity, and environmental mitigation and management improvements.

Technical assistance programs can be tied to SPC programs, to specific systems programs (for example motor system optimization assistance), to specific end-use sectors (for example education, healthcare and municipal) or to specific customer classes (for example small commercial or agricultural).

Technical assistance programs are usually carried out by third party consulting firms with considerable expertise in the field. Often the customer must pay a significant share of the costs for the assistance.

#### **Consumer Education**

A basic barrier to increased energy efficiency is the lack of awareness among consumers and businesses concerning what opportunities are available and how to take advantage of these opportunities. Consumer education programs focus on raising consumer awareness and showing how to take advantage of a number of opportunities.

Education programs can be both broad in scope covering many consumer types and also focus on their specific end-users and applications. Residential, small commercial and institutional consumers especially benefit from educational programs.

Strong consumer education programs are viewed as an important step in developing consumer interest in energy efficient products and practices thus helping transform the market for such products and practices.

# **Renewable Energy Programs**

The objective of renewable energy programs is to increase the market share of electricity demand met by renewable sources on either side of the consumer's meter or in larger grid-integrated projects.

Public benefit funds can be used to increase use of renewable energy sources by:

- demonstrating renewable energy applications;
- reducing renewable energy developers' risks through subsidies or low cost loans;
- implementing interconnection rules;
- establishing net metering standards;
- implementing environmental disclosure rules;
- educating consumers regarding the environmental benefits of renewable energy; sources and how to acquire electricity from renewable sources; and
- facilitating the development of renewable resources.

Green marketing programs are a direct means to transform the retail electricity market towards a greater renewable resource share. Green marketing programs benefit from environmental disclosure requirements and green product labeling standards.

# **Emissions Reduction Credit Programs**

Increased energy efficiency and greater use of renewable sources reduce the emissions of pollutants into the atmosphere by reducing the demand for fossil fueled electricity. Some emission reduction programs can provide direct economic benefits to such efficiency and renewable measures.

The EPA's SIP Guidance Document encourages states to include a set-aside for  $NO_x$  emissions reductions resulting from energy efficiency or renewable sources. The verified emission reductions can be translated into money in the state's  $NO_x$  emission credit trading program. Verification of emissions reduction is a key factor in determining which EE measures are included in such programs.

#### Part 2: Residential

# **New Residential Building Construction Programs**

Residential building construction programs can target upgrading and enforcing the EE component in building codes (e.g., Model Energy Code); training builders and local enforcement officials; and encouraging a market in "above code" housing. The code and its enforcement establish a floor for energy efficient housing. These market intervention programs focus on creating a market for housing above or significantly above the efficiency provided by the code.

Building code upgrades tied to builder and designer education, training and software assistance often are core EE programs. Enforcement of the Energy Code is a critical step in realizing the potential energy savings. Education and training of local building code officials is a means of increasing the level of enforcement.

Home Energy Rating Systems (HERS) programs provide home owners and buyers with the means to evaluate the energy efficiency of new and existing homes. HERS programs operate by establishing rating classes above the building code level and thus identify the advantage of higher energy efficient housing. Energy efficient mortgages (EEMs) often are tied to HERS programs. EEMs can allow a buyer to qualify for a higher mortgage, or to finance energy improvements in the mortgage and pay for the improvements over the life of the loan. High HERS ratings provide an additional marketing tool for home builders.

Energy Star Homes Programs encourage major residential builders to provide homes at least 30 percent more efficient than the Model Energy Code through Energy Star marketing and better mortgage rates. Mortgage lenders participating in the Energy Star Homes program offer mortgage interest rates, often below the retail rate.

# **Residential Products Programs**

The objective of residential products programs is to intervene in the traditional supplier-retailer-customer markets by encouraging suppliers to manufacture highly energy efficient (HEE) products; retailers to stock and aggressively market HEE products; and customers to desire HEE products.

The usual market intervention is a payment to either the customer or the retailer to offset (all or in part) the cost of the HEE product above the standard product cost. The product payment discount usually is tied to a broad scale customer educational campaign. Training retailer staff in the value of HEE products is often included in the program.

The National Energy Star programs are examples of such market intervention programs. The Energy Star label products are significantly more efficient than products meeting the government minimum standards.

Energy Star label products include:

- appliances (clothes washers, refrigerators, dishwashers, room air conditioners, TVs and VCRs);
- heating and cooling systems (furnaces, air conditioners, geothermal heat pumps, programmable thermostats and boilers);
- home office equipment (computers, scanners, monitors, printers and copiers);
- light fixtures, windows, doors and sky lights.

Residential lighting (primarily CFLs) programs often have relied upon direct deployment through utility DSM programs.

# **Residential Program Coordination**

The relevant selected residential programs must be coordinated with the Weatherization Assistance Program (WAP) and the Low Income Home Energy Assistance Program (LIHEAP) to achieve maximum effectiveness in terms of program design and delivery systems.

#### Part 3: Commercial/Industrial

#### **Commercial Building Construction**

The objective of commercial building construction programs is to support building code upgrading to meet the latest ASHRAE standard when adopted; educate building designers, builders, contractors and developers on the new code especially its performance aspects; and educate and train building code officials to increase enforcement of the code.

#### **Commercial/Industrial Systems and Equipment Programs**

The objective of commercial/industrial systems and equipment programs is to increase HEE systems and equipment market share by intervening in both the traditional supplier and dealer customer market and the traditional designer and customer new system market. Intervention programs can be linked to national, regional or state educational and promotional programs which result in major firms pledging to upgrade the energy efficiency of some basic systems. These programs include Motor Challenge, Steam Challenge, Compressed Air Challenge, and Energy Star Building/Greenlights Partnership

The education and promotional program can provide specified guides for systems and equipment, technology-specific design and decision tools, and case studies to convince customers to make HEE decisions.

The market intervention programs target suppliers to provide HEE equipment at a significantly higher efficiency than current standards; dealers to stock and promote HEE equipment; designers to design HEE systems for customers; and customers to understand the value of HEE systems and equipment. These programs often include direct payments to dealers or customers to lower the initial cost differential between HEE systems and standard systems. The program includes aggressive marketing campaigns linked to the dealer/customer relationship.

Commercial and industrial systems and equipment technology targets include commercial lighting, HVAC packaged systems, premium motors and variable speed drives, and customer side transformers. The commercial programs assisted by Energy Star labeling programs include office equipment (copiers, scanners, laser printers, facsimiles, monitors, and computers, exit signs, and transformers.